## **CLAIMS**

## We claim:

- 1. A headset for spatial restitution of a sound fitted with two headphones, each headphone comprising a bracket defining at least partially a cap-shaped surface including globally the listener's ear, each headphone comprising at least five loudspeakers, arranged on said hemispheric surface characterised in that two adjoining loudspeakers are spaced apart by a distance smaller than twice the shortest wavelength corresponding to a given maximum frequency in order to reconstruct an acoustic field perceived as continuous by the human ear, for acoustic frequencies smaller than said given maximum frequency, said maximum frequency being a frequency audible to the average human ear.
  - 2. A headset according to claim 1 comprising at least six loudspeakers per headphone.
- 3. A headset according to claim 1, wherein said maximum frequency is 5 kHz and wherein two adjoining loudspeaker are spaced apart by a distance equal to or less than 3 cm.
- 4. A headset according to any of the preceding claims, wherein said headphones are open, said bracket being formed of an armature capable of receiving said loudspeakers.
- 5. A headset according to any of claims 1 to 3, wherein headphones are closed, said bracket comprising a shell defining a cap-shaped surface capable of receiving said loudspeakers.
- 6. A sound recording device intended for later spatial restitution, formed of a headset according to any of the preceding claims wherein the loudspeakers are replaced with multidirectional or cardioid microphones, the recording cap-shaped surface corresponding to said recording device being confused with said cap-shaped surface (for acoustic transmission) of one said headset.

## **CLAIMS** (from Annex to IPER)

We claim:

- 1. A headset for spatial restitution of a sound fitted with two headphones, each headphone comprising a bracket defining at least partially a cap-shaped surface including globally the listener's ear, each headphone comprising at least five loudspeakers, arranged on said hemispheric surface characterised in that two adjoining loudspeakers are spaced apart by a distance smaller than half the shortest wavelength corresponding to a given maximum frequency in order to reconstruct an acoustic field perceived as continuous by the human ear, for acoustic frequencies smaller than said given maximum frequency, said maximum frequency being a frequency audible to the average human ear.
  - 2. A headset according to claim 1 comprising at least six loudspeakers per headphone.
- 3. A headset according to claim 1, wherein said maximum frequency is 5 kHz and wherein two adjoining loudspeakers are spaced apart by a distance equal to or less than 3 em.
- 4. A headset according to any of the previous claims, wherein said headphones are open, said bracket being farmed of an armature capable of receiving said loudspeakers.
- 5. A headset according to any of claims 1 to 3, wherein seld headphones are closed, said bracket comprising a shell defining a capshaped surface capable of receiving said loudspeakers.
- 6. A sound recording device intended for later spatial restitution, formed of a headset according to any of the preceding claims wherein the loudspeakers are replaced with multidirectional or cardioid microphones, the recording cap-shaped surface corresponding to said recording device being confused with said cap-shaped surface (for acoustic transmission) of one said headset.